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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,255	12/04/2003	Arne Reinheimer	DT-6700	7784
30377 7590 03/12/2007 DAVID TOREN, ESQ. ABELMAN FRAYNE & SCHWAB 666 THIRD AVENUE NEW YORK, NY 10017-5621		EXAMINER		
			LANGEL, WAYNE A	
			ART UNIT	PAPER NUMBER
NEW TORK,	11 10017-3021		1754	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE
3 MONTHS		03/12/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
Office Action Summany	10/728,255	REINHEIMER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Wayne Langel	1754				
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the may be armed patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be tind ad will apply and will expire SIX (6) MONTHS from tute, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
,	 his action is non-final.					
,	, _					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-11</u> is/are rejected.						
7) Claim(s) is/are objected to.	·					
8) Claim(s) are subject to restriction and	l/or election requirement.					
Application Papers						
9)☐ The specification is objected to by the Exami	ner					
		ted to by the Examiner				
10)⊠ The drawing(s) filed on <u>04 December 2003</u> is/are: a) accepted or b)⊠ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
	an priority under 35 U.S.C. & 110/a	\-(d) or (f)				
a)⊠ All b)☐ Some * c)☐ None of:	12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
	, — , — ,					
_ : : :	-	ion No				
application from the International Bure		3				
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Motice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) 4) Paper No(s)/Mail Date 5) Notice of Informal Patent Application						
Paper No(s)/Mail Date	6) Other:	. **				
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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al or Yamada et al or Greinke et al '450 or Mercuri or British 2,128,971 or JP 2-153811. No distinction is seen between the method and composition disclosed by Kondo et al, Yamada et al, Greinke et al '450, Mercuri, British 2,128,971 and JP 2-153811, and that recited in applicants' claims. Kondo et al, Yamada et al, Greinke et al '450, Mercuri, British 2,128,971 and JP 2-153811 all disclose the step of washing sulfuric acid-graphite particles with an aqueous washing liquid containing compounds which would affect the expansion properties. For example, Kondo et al disclose washing with a metal salt of a boric acid ester of a saccharide (see the Abstract); Yamada et al disclose washing with an aqueous solution of phosphoric acid (see the paragragh bridging columns 2 and 3); Greinke et al '450 disclose contacting with an organic molecule having C -C carbon atoms and a polar end functional group (see the Abstract); Mercuri discloses washing with a carboxylic acid immediately after intercalation (see Paragraghs [0030] and [0031]; British 2,128,971 discloses washing

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with an aqueous solution of nitric acid (see the Abstract, page 1, lines 69-74 and page 2, lines 16-24); and JP 2-153811 discloses washing with sodium compounds which may be sodium salts of organic acids (see the English Abstract and the claims).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is indefinite as to whether the aqueous washing liquid contains the compounds affecting the expansion properties, since there is a comma (,) after "liquid". It is indefinite as to whether the particles or the pH is measured. In claim 1, line 4, "oxidizing agent, washed" is ungrammatical and therefor indefinite. In claims 3 and 5-10, "at least one representative of the group comprising" is improper Markush terminology.

The Drawings and specification are objected to under 37 CFR 1.84 (u) (1) in referring to the sole figure as "Figure 1".

The specification is objected to under 37 CFR 1.74 in failing to include a "Brief Description of Drawings". See MPEP 608.01 (f).

The other references are made of record for disclosing methods for forming expandable sulfuric acid-graphite particles.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Langel whose telephone number is 571-272-

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1353. The examiner can normally be reached on Monday through Friday, 8 am - 3:30 pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Wayne Langel Primary Examiner Art Unit 1754